



4.0 MEGA-PIXEL DIGITAL CAMERA
WITH 3X OPTICAL ZOOM (DS9610)

USER MANUAL

CONTENTS

Introduction	1
Front and Top View	1
Back and Side View	2
Mode Dial	2
4-Way Directional Controller / SET Button	2
Getting Started	3
Package Contents	3
Installing and Charging the Batteries	3
Attaching the Strap	3
Memory Storage	4
Installing the SD Card / MMC	4
Removing the SD Card / MMC	5
Memory Full	5
Basic Photography	5
Preparing the Camera	5
Taking Basic Pictures	6
Displaying Last Image Taken	7
Selecting Flash Mode	7
LED Light	7
Zooming	8
Using the Self-Timer	8
Camera Setup	9
Auto Off (Auto Power-Off)	10
Set Clock	10
Set City	10
Play Vol (Play Volume)	11
P. Counter (Picture Counter)	11

Show Time	11
Language	11
Video Out	11
Beep Tone	11
File Number	12
Format	12
Reset	12
Freq Select (Frequency Select)	13
LCD Brightness	13
Information	13
Camera Modes	13
Still-Picture Modes	13
Movie Mode	14
Menu Settings	15
Image Size	15
Quality (Picture Quality)	16
White Balance	16
Auto Focus	17
Metering	17
ISO	18
EV (Exposure Compensation Setting)	18
SPE Effect (Special Effects)	19
SCH Shot (Schedule Shot)	19
Shot CFM (Shot Confirmation)	19
INS Review (Instant Review)	19
Record Mode Menu Options	20
Switching Between Camera and Movie Mode	20
Shooting Movies	20
Recording a Movie	20
Movie Menu	21
Scene Mode Selection	22
Selecting from the Menu	22
Playback of Images and Movies	23
Displaying Thumbnails	23
Playback Operation	24
Zooming into Playback Images	25
Scrolling a Magnified Image	25
Deleting a Playback Image	25

Movie Playback	25
Playing Movies on your PC	26
Deleting a Playback Movie	26
Playback Menu	26
Playback Menu	27
Rotating Images	27
Slideshow	27
Deleting Multiple Images or Movies	28
File Copy	29
Protecting Images or Movies	29
DPOF (Specifying Digital Print Order Format)	30
Voice Memo Mode	31
Activating the Voice Memo Feature	31
Recording Voice	31
Voice Playback	32
Copying Files	32
From Internal Memory to Memory Card	33
From Memory Card to Internal Memory	33
Connecting to External Devices	33
Connecting to a TV	33
Installing Software Drivers (Windows-Based PC)	34
Transferring Files from Camera to PC or Macintosh	35
Disconnecting the Camera from the PC	36
Addendum	36
Memory Capacity, Size and Quality	36
Troubleshooting	37
Specifications	40
Important Notice	42
Statement of Responsibility	42
Notes on Copyright	42
General Warnings	42
Cleaning the Digital Camera	43
About Oregon Scientific	43
Trademark Information	44
FCC Statement	44

INTRODUCTION

Thank you for selecting the Oregon Scientific™ 4.0 Mega-Pixel Digital Camera with Color Display as your personal product of choice. It features 4x digital zoom and comes with 16MB of internal memory, and is compatible with Secure Digital (SD) memory cards. Your camera is designed to give you many years of reliable service.

Other features Include:

- Various capture modes: Program mode, Aperture priority mode, Shutter-speed priority mode and 9 scene modes
- Voice memo mode
- Self-timer
- Movie mode with audio
- Home / world time
- Video output
- USB 1.1 interface
- White balance and manual exposure compensation settings
- Spot / evaluative / center light meter modes

FRONT AND TOP VIEW



1. ON button
2. SHUTTER RELEASE button
3. Flash
4. Mode dial
5. Speaker
6. Microphone
7. AF / Self-timer LED
8. Optical viewfinder
9. Zoom lens

BACK AND SIDE VIEW



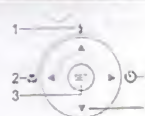
1. Viewfinder
2. LED
3. LCD
4. Tripod hole
5. Battery compartment
6. DISP (Display) button
7. DELETE button
8. MENU button
9. W (ZOOM OUT) / T (ZOOM IN) button
10. PLAYBACK button
11. Camera strap hole
12. 4-way directional controller / SET button
13. USB jack
14. RESET hole
15. Video-out

MODE DIAL



1. Shutter-speed priority mode
2. Program mode
3. Auto mode
4. Scene mode
5. Aperture priority mode
6. Movie mode
7. Setup mode
8. Voice memo

4-WAY DIRECTIONAL CONTROLLER



1. ▲ button (Flash)
2. ◀ button (Macro mode)
3. SET button
4. ▶ button (Self-timer)
5. ▼ button

GETTING STARTED

PACKAGE CONTENTS

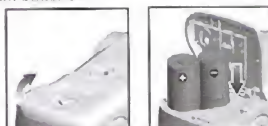
When you unpack your digital camera, make sure to keep all the packing materials in a safe place, in case you need to later return it for servicing.

In the box, you will find:

- Carrying pouch
- 2 x AA lithium batteries
- USB cable
- Video cable
- User manual
- CD-ROM
- Camera strap

INSTALLING THE BATTERIES

Installing lithium batteries:



Your camera comes with 2 AA-sized lithium batteries. To prevent damage, correctly insert the batteries as shown.

TIP: To maximize the performance of your camera and for greater battery life, control the use of the flash, photo review, and LCD brightness levels.

ATTACHING THE STRAP



1. Pass the thin loop of the strap through the camera's strap ring.
2. Pass the other end of the strap through the loop.
3. Tighten by pulling the loop.

3

MEMORY STORAGE

Secure Digital (SD) cards and Multi-Media cards (MMCs) are external memory cards that can be plugged into your digital camera for storing images and movies.

The type of memory currently used by the camera is indicated on the LCD:

ICON	MEMORY TYPE	DESCRIPTION
	Internal	Files are stored in the camera's internal memory.
	External	Either a SD card or a MMC has been installed. Files are stored on the card's memory.

NOTE: When the SD card / MMC is installed, all images and movies taken are automatically stored on the card.

INSTALLING THE SD CARD / MMC



1. Turn off the camera.
2. Open battery compartment on the bottom of the camera.
3. Slide the card into the memory slot until it clicks into position.

NOTE: The SD card / MMC will not insert fully into the slot if it is facing the wrong way. Be careful not to apply undue force to the card.

4

REMOVING THE SD CARD / MMC



1. Turn off the camera.
2. Push against the card lodged inside the memory slot.
3. The card automatically ejects itself out of the slot.

MEMORY FULL

When there is no more storage space available, "Internal Memory Full" or "Memory Card Full" is shown in white color on the LCD.

NOTE: Do not insert or remove the SD card / MMC while the camera is on. You must turn off the camera when inserting the card, and then power on after insertion.

BASIC PHOTOGRAPHY

PREPARING THE CAMERA

1. To turn on and off the camera, press the ON button located along the top of the camera.
2. Check the battery indicator to make sure there is enough power.

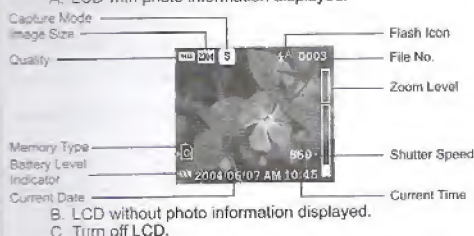
ICON	DESCRIPTION
	Adequate power remains
	Battery is running low
	Battery is running very low
	Battery is exhausted

NOTE: To ensure the camera provides optimal performance, change the batteries as soon as possible if they are running low on power.

5

NOTE: If you are in the middle of capturing a photo or movie and the batteries run out of power, the zoom lens will not retract to its non-operation condition. When you replace the batteries, the lens will re-initialize and start up again.

3. Slide the Mode Dial to the desired setting.
4. In Record Mode, press the DISP button to toggle between 3 levels of display information settings:
A. LCD with photo information displayed.



- B. LCD without photo information displayed.
- C. Turn off LCD.

NOTE: The button is used to either enter Playback Mode or return to Preview Mode. The LCD is automatically switched on in either mode.

TAKING BASIC PICTURES

1. Make sure the camera is set to Camera Mode ("Auto" Mode, or "P", "S", or "A" Mode).
2. Frame and view your subject in the LCD.
3. Press and hold the **SHUTTER RELEASE** button half way to focus on the subject. The bottom LED on the backside of the camera will show green, meaning the camera is on auto-focus and ready to take a picture.
4. Fully press the **SHUTTER RELEASE** button. The image taken is displayed on the LCD review (The review time is adjustable in the Menu options).
5. Once Auto Review has finished, take the next picture.

6

DISPLAYING LAST IMAGE TAKEN

You can display the last image taken as well as other images by pressing **(B)**. When viewing the last image, you may choose to delete it by pressing **(C)**. The delete confirmation screen will be shown on the LCD. Press the **SET** button to confirm deletion, or press the **MENU** button to cancel. Press **(C)** to return to shooting.

SELECTING FLASH MODE

Press **(A)** to turn the camera flash on and observe the flash icon on the LCD. When a picture with flash has been taken, the right LED will blink red while the flash is recharging. Once the LED stops blinking, you can resume taking pictures again. When no flash is set, the right LED will blink green.

ICON	FUNCTION	DESCRIPTION
	Auto	The flash may go off automatically, depending on light conditions.
	Flash On	The flash goes off regardless of lighting condition.
	Flash Off	The flash will not go off (default setting)

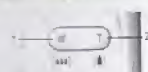
LED LIGHT

The LED lights mean the following:

- Top LED is orange: flash is forced on and ready
- Top LED is flashing: flash is charging
- Bottom LED is green: ready to take a picture
- Bottom LED is flashing green: camera processing and saving images
- Bottom LED is red: camera cannot focus
- Top (orange) and bottom (red) LED flashing: camera error or memory error

7

ZOOMING



1. **W** (Wide) button
2. **T** (Tele) button

Your digital camera comes with a 3x optical and 4x digital zooming function.

By default, the zooming is not enabled.

1. In both Record and Playback Modes, increase zooming by pressing the **T** (Tele) button. The hollowed white bar along the right side of the LCD indicates the current zoom level. (Watch it move as you zoom in or zoom out).
2. To decrease the zooming, press the **W** (Wide) button.

NOTE: In Movie Mode, once the **SHUTTER RELEASE** button is pressed and recording starts, zooming cannot be further adjusted for the duration of the recording.

USING THE SELF-TIMER

The Self-Timer function counts down from 10 seconds before the camera automatically takes a picture by itself. This is useful when you want to be in the picture and there is no one else to press the **SHUTTER RELEASE** button.

To activate the Self Timer:

1. Slide the Mode Dial to Record Mode (Auto, P, S, or A modes).
2. Press **(A)** to activate the Self-Timer function. The Self-Timer red LED light comes on and the Self-Timer icon appears on the LCD.

TIP: If you wish to cancel the Self-Timer function at this stage, press **(A)** again and the icon on the LCD will disappear.

8

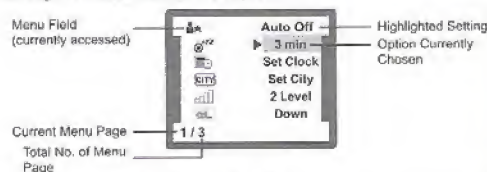
3. Press the **SHUTTER RELEASE** button. Audible beeps can be heard, and the Self-Timer lamp will start blinking. The number displayed next to the LCD's Self-Timer icon will appear and start counting down from 10 seconds.
4. Press the **SHUTTER RELEASE** button again anytime during the countdown between 10 and 3 seconds and the Self-Timer will jump to count down from 3 seconds.

NOTE: Press the **SHUTTER RELEASE** button again between 3 seconds to 1 second during the count down to cancel the Self-Timer function.

NOTE: Once a picture has been taken, the Self-Timer will automatically disable.

CAMERA SETUP

Under the Camera Setup, which is available in all modes, the basic settings of the camera can be adjusted.



1. Rotate the Mode Dial to **SETUP**.
2. Use **(A)** or **(V)** to navigate through the various settings and press **(A)** to enter the selected setting.
3. Use **(A)** or **(V)** to navigate through the different setting options and press the **SET** button to confirm a selected option.

9

AUTO OFF (AUTO POWER-OFF)

You can set the camera to turn off automatically when no operation is performed. The period of time before shutdown can be adjusted: None, 3 min. (default), 5 min., or 10 min.

NOTE: Auto Off is not available in slideshow mode or when the camera is connected to a PC.

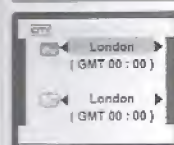
SET CLOCK

This sets the Date and Home Time of the camera. When accessed, a new Set Clock configuration screen will appear. Press **(A)** or **(V)** to adjust the values of each field.

Fields include the following:

- Current Date Field** - adjust the current date of the camera.
- Date Format** - choose from the following date formats:
 - DD/MM/YY (date, month, year)
 - MM/DD/YY (month, date, year)
 - YY/MM/DD (year, month, date)
- Current Time Field** - adjust the current time of the camera.
- Time Format** - choose between 12-hr (AM/PM) or 24-hr display.

SET CITY



You can choose to display the current time in two different time zones. Configure the time zone of your Home and World City from an extensive list of city names. (Cities are listed alphabetically).

10

NOTE: The World Time cannot be directly set. It automatically adjusts itself via the time zone offset, using the Home Time values specified in the Set Clock setting. If your city is not selectable, choose another city within your time zone instead.

PLAY VOL (PLAY VOLUME)

To adjust the volume of your camera, you can select between four levels of volume as well as "0 Level." (This is no volume). This can be done only during playback of a movie or voice memo.

P. COUNTER (PICTURE COUNTER)

The Picture Counter can count the number of images already taken (count up) or available to be saved onto memory (count down). You can select "Up" or "Down".

SHOW TIME

You can choose to display either the "Home Time" (default) or "World Time" on your camera.

LANGUAGE

Choose your menu language: English (default), French, German, Spanish, Italian and Portuguese.

VIDEO OUT

If connecting the camera to a TV, you can set the camera's video output system to either the "PAL" or "NTSC" standards. The default video out setting is set to PAL.

BEEP TONE

The camera will make "beeping" sounds during certain functions. This "beeping" sound can be turned "On" (default) or "Off."

FILE NUMBER

Your camera keeps an internal file counter for every image and movie taken. This number can be reset. The setting options are "Continue" (default) and "New".

All files are stored within a designated folder.

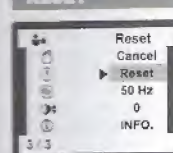
- Under the "Continue" option, the internal file counter is first set to "0001". Every subsequent picture is assigned an incremental File Number.
- Under the "New" option, the internal file counter to "0001" for new media only. However, in case there are image files already present inside the storage media, it will start counting from the highest file number of the media.

FORMAT

This option will format all data in either the internal memory or the external SD card / MMC, including all protected files.

CAUTION: Do not eject the SD card / MMC while the card is being formatted, as this may damage the card. Formatting deletes all data from the chosen memory device. Files will not be recoverable.

RESET



You can reset all camera settings to factory default (except for the current time and date).

FREQ SELECT (FREQUENCY SELECT)

To correct indoor exposure during photo taking, you can choose to set the camera at either 50 or 60Hz.

LCD BRIGHTNESS

You have the ability to increase or decrease the brightness of the LCD display by selecting from a range of settings between 2 and -2.

INFORMATION

Accessing this feature will display the system information of the unit, such as the model number and firmware version.

CAMERA MODES

The camera has 5 still-picture capture modes and 1 movie mode. The Mode Dial is rotated to the specific position so that the camera switches to the corresponding mode.

STILL-PICTURE MODES

- Auto** (camera mode) - Use this mode when you want to capture images without needing to tweak manual settings. This mode is fully automatic.
- P mode** (program camera mode) - Use this mode when you want to capture images using the camera's features manually. This will give you greater power over the look of the image captured.
- S mode** (shutter-speed priority) - Use this mode when capturing images that are moving. The camera focuses on capturing the image with a faster shutter-speed.
- A mode** (aperture size priority) - You may choose from 2 aperture settings when capturing an image, in case you want to let more light into the image.

- Scene mode** - Select this mode when you want to define the scene of the captured image in the following ways: Portrait, Landscape, Night Portrait, Night Landscape, Backlight, Sports (Fast Shutter), Indoor, Dawn and Sunset.

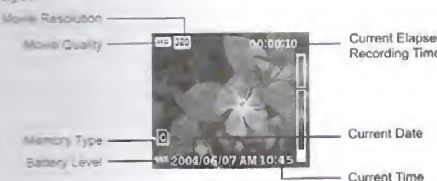
NOTE: For Shutter-speed priority mode and aperture priority mode, speed and f or aperture respectively by pressing the ∇ key to activate the setting (the shutter speed and will be flashing) and then use the \blacktriangle / \blacktriangleright buttons to increase or decrease shutter-speed or aperture.



Press the **MENU** button to access the menu screens, where settings can be specified.

MOVIE MODE

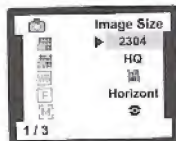
Movie mode - Select this mode when you want to capture moving images



MENU SETTINGS

Different modes have different menu options and different number of options available to adjust. To change a menu option in your camera:

1. Rotate the Mode Dial to the desired setting. Note that you cannot access the menu options when the Mode Dial is on **SETUP** or **+**.
2. Press the **MENU** button to enter the choice of menu options.
3. Use **▲** or **▼** to navigate through the various options and press **▶** to enter the selected option.
4. Use **▲** or **▼** to navigate through the various settings and press the **SET** button to confirm selected setting.



NOTE: Read section on "Movie Menu" under **SHOOTING MOVIES** for more information on how to access the menu settings while in movie mode.

IMAGE SIZE

Image size represents the picture resolution. The resolution is directly related to the number of pixels of the camera. As such, 4.0 Mega-pixel can be arranged as 2048 x 1536 pixels or lower.

NOTE: The higher the resolution size of an image, the larger the memory space it occupies.

ICON	TYPE OF MEDIA	DESCRIPTION
2304	Extra Super Fine Image (default)	Exceptional detail and resolution (2304 x 1728, 4.0 Mega-Pixel)
2048	Super Fine Image	Excellent detail and resolution (2048 x 1532, 3.2 Mega-Pixel)

15

ICON	TYPE OF MEDIA	DESCRIPTION
1600	Fine Image	Very good detail and resolution (1600 x 1200, 2.0 Mega-Pixel)
1280	Normal Image	Good clarity and resolution (1280 x 1024, 1.3 Mega-Pixel)
640	Basic Image	Basic quality and resolution (640 x 480, VGA)

QUALITY (PICTURE QUALITY)

The picture quality represents the compression rate of the images taken.

NAME	OPTION	DESCRIPTION
HQ	High Quality	Good image quality, high amount of image data
STD	Standard	Standard quality, medium amount of image data
ECO	Economy	Lowest quality, least amount of image data

NOTE: The higher image quality and resolution, the larger the memory space it occupies on the memory card.

WHITE BALANCE

You can take pictures according to light conditions by setting the camera's white balance function. By using this, the images will have the correct balance of color.

ICONS	SETTINGS	OPTIONS
WB AUTO	Auto (default)	Adjusts the white balance automatically
Sunlight	Sunlight	Use outside in sunlight

16

ICONS	SETTINGS	OPTIONS
Shade	Shade	Use outside in the shade
Yellow F.L.	Yellow F.L.	Use under yellow fluorescent lamp
White F.L.	White F.L.	Use under white fluorescent lamp
Tungsten	Tungsten	Use under electric or other tungsten light

AUTO FOCUS

Three focusing zones are designed for the camera. Options are set in the Menu for the user to choose the following focusing zones: center, horizontal, left, right, or left and right.

NOTE: In Camera Mode, the focus is preset to a center focus.

METERING

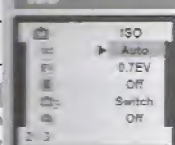
Metering is a setting that determines your subject's correct exposure. The camera will compute the brightness levels, contrast, and amount of bright to dark parts in the scene automatically.

ICONS	SETTINGS	OPTIONS
Matrix (multi-segment)	Matrix (multi-segment)	Evaluated by splitting the scene into multiple zones, then calculate each zone's exposure via the camera's computations. Ideal for general photography.
Central (Center-weighted)	Central (Center-weighted)	Averages the exposure of the entire scene but gives extra weight to the center. Use for backlit subjects (default setting).

17

ICONS	SETTINGS	OPTIONS
Spot	Spot	Only the small area at the center of the screen determines the exposure. Ideal for highlighting the main subject.

ISO



The ISO setting affects the camera's sensitivity to light.

NOTE: An image taken at higher ISO speeds may contain more "noise" or graininess than an image taken at lower speeds.

SPEED	DESCRIPTION
ISO AUTO	The camera sets the speed automatically (default setting)
ISO 100	ISO rating 100 - Use for very brightly lit scenes
ISO 200	ISO rating 200 - Use for brightly lit scenes
ISO 400	ISO rating 400 - Use for normally lit scenes

EV (EXPOSURE COMPENSATION SETTING)

Exposure compensation is required when there is an extreme difference in brightness between the background and the subject. Use this setting to manually brighten or darken an image. Default setting is 0.0.

EV	+2.0 / +1.7 / +1.3 / +1.0 / +0.7 / +0.3 / 0.0 / -0.3 / -0.7 / -1.0 / -1.3 / -1.7 / -2.0
----	---

18

TIP: The zoom function cannot be activated in the movie capture and preview mode).

NOTE: The length of the movie that can be taken depends on the amount of memory available within your camera's current memory storage.

FUNCTION	DESCRIPTION
Toggling LCD Information	Identical procedures to Camera Modes
Zooming	Identical procedures to Camera Modes
Begin Recording Movie	Press the SHUTTER RELEASE button
Stop Recording Movie	Press the SHUTTER RELEASE button again after recording has started

MOVIE MENU

1. Rotate the Mode Dial to the "Movie" position so that the camera switches to the movie mode.
2. Press the **MENU** button.
3. Use the direction button to navigate the Menu screen. Press **SET** to confirm setting changes.

SETTINGS	OPTIONS
White Balance	Auto (default) / Sun light/ Shade/ Yellow F.L. (Fluorescent Lamp) / White F.L. (Fluorescent Lamp) / Tungsten
EV	+2.0 / +1.7 / +1.3 / +1.0 / +0.7 / +0.3 / 0.0 (default) / -0.3 / -0.7 / -1.0 / -1.3 / -1.7 / -2.0

SETTINGS	OPTIONS
Movie Size	640 (640 x 480 pixels) / 320 (320 x 240 pixels) (default)
Movie Quality	ECO (Economy), STD (Standard) (default), HQ (High quality)

SCENE MODE SELECTION

To change to Scene Mode, turn the Mode Dial to "SCENE" to select from a total of 9 scene options.

SELECTING FROM THE MENU

1. Press the **MENU** button to enter the Scene Mode.
2. Press **▶** on the Direction button to enter the Scene Sub-menu. Scroll through the 9 scenes and select the scene you desire.
3. Press the **SET** button to confirm.

NOTE: Scene Modes include the following scenes:

	Portrait		Sports (Fast Shutter)
	Landscape		Indoor
	Night Portrait		Dawn
	Night Landscape		Sunset
	Backlight		

PLAYBACK OF IMAGES AND MOVIES

To playback captured images, press the **PLAYBACK** button when the camera is powered on. The camera will enter the Playback Mode. The display is switched to the photo preview mode.

To exit the Playback Mode, press the **PLAYBACK** button again.

The Playback Mode can be divided into two sub-modes:

Thumbnail selection mode
Image/video display mode (Default)

DISPLAYING THUMBNAILS

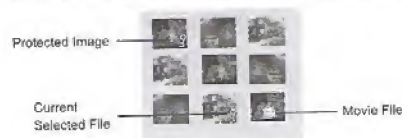
To display a thumbnail:

1. Press the **WIDE** button to enter the thumbnails.
2. Press the **TELE** button to change the picture from thumbnail to whole screen display.

Thumbnails of photos or video (in 3 columns x 3 rows) are displayed a maximum of 9 at a time.

The first photo will be displayed at the top left corner and the ninth one will be displayed in the bottom right-hand corner.

NOTE: Each of the 9 thumbnail images should be treated as one page.



PLAYBACK OPERATION

In Playback Mode, you can review the images and movies stored within your current active storage memory. The last image or movie taken is displayed on the LCD in Playback Mode.

To enter Playback Mode, press **▶** and then press **◀** or **▶** to view through the images and movies taken.

NOTE: If the SD card / MMC is inserted, Playback Mode will only show images and movies stored on that card. To access data stored within the internal memory, the SD / MMC card must first be removed.

IMAGE PLAYBACK

Image Playback Mode On-Screen Display



MOVIE PLAYBACK

Movie Playback Mode On-Screen Display



Your DS9610 digital camera has the ability to capture and playback movies with audio because of its built-in microphone and speaker.

ZOOMING INTO PLAYBACK IMAGES

The zooming function can magnify images up to 4x (this is indicated as x4.0 on the camera) on the LCD: x1.5 / x2.0 / x2.5 / x3.0 / x3.5 / x4.0.

To zoom in while in the Playback Mode:

1. Press **[Z]** to zoom in any image. (There is an indicator along the right side of the viewing lens to see what the zoom level is; it shows the current magnification level).
2. To zoom out of the image, press **[Z]**.

SCROLLING A MAGNIFIED IMAGE

While an image is magnified, only a portion of the image will be visible. Press the **SET** button to enable / disable scrolling, then use the direction button to scroll to other parts of the image.

DELETING A PLAYBACK IMAGE

To delete the image currently being viewed during playback, press **[Z]** and then press **SET** to confirm or press **MENU** to cancel.

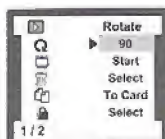
NOTE: Protected images (indicated with (**Ⓜ**)) cannot be deleted and must be unprotected first. (Please see **PROTECTING IMAGES OR MOVIES** section for more details).

MOVIE PLAYBACK

To playback movies:

1. Wait until the icons disappear from the playback movie. The "Set" icon will then appear.
2. Press the **SET** button to start playback.
3. Press the **SET** button again to stop playback. The movie will return to the Movie Playback LCD screen.

NOTE: All zooming functions are disabled during Movie Playback mode.



To enter into the Menu Mode to adjust settings, press the **MENU** button.

PLAYBACK MENU

To change the settings in the Playback Mode:

1. Press the **PLAYBACK** button.
2. Press the **MENU** button to access the Playback Menu.
3. Use the direction button to navigate the Menu screen and select desired setting.
4. Press the **SET** button to confirm setting changes.

ROTATING IMAGES

In Playback Mode, you can rotate images to view them from different angles. Images can be rotated 90°, 180° or 270°.

SLIDESHOW

You can play back all images and movies in a Slideshow format. The interval between images can be specified, and you can choose to keep repeating the slideshow or to discontinue after all the images have been seen.

SETTINGS	DESCRIPTIONS
Start	Start the Slideshow according to the specified Interval and Repeat options.
Interval	Specifies the amount of time an image will take to be displayed before moving on to the next image. The options are 3 sec., 5 sec., and 10 sec.

PLAYING MOVIES ON YOUR PC

First you must copy files to your PC. (Please see the **TRANSFERRING FILES FROM CAMERA TO PC OR MACINTOSH** section).

To play movies on your PC:

1. Open your Windows Media Player 9 from your programs menu.
2. Go to the File Menu and click **OPEN** to select a movie file to playback.
3. Once you have selected a movie file, press the **OPEN** button. The movie file should then begin playing.

NOTE: If you do not have Windows Media Player 9, then we recommend you visit the Microsoft website to download the latest version.

DELETING A PLAYBACK MOVIE

To delete the movie currently being viewed, stop the playback, press **SET** to confirm. Remember, protected movies (indicated with (**Ⓜ**)) cannot be deleted and must be unprotected first.

To see movies as thumbnails:

In Playback Mode, press the **WIDE** button. (Thumbnails of images will appear on the LCD, with movies marked with the movie projector icon). Use the direction button to navigate. Select the movie you want to view, then press the **TELE** button.

Press the **SET** button to watch the chosen movie.

Press the **SET** button to stop the movie. (Press the **PLAYBACK** button to exit the Playback Mode).

PLAYBACK MENU

While in the Playback Mode, you can adjust the settings for playing movies. Remember to press the **PLAYBACK** button to enter the Playback Mode.

SETTINGS	DESCRIPTIONS
Repeat	When set to "On", the slideshow immediately replays when the final image is displayed.

To change to slideshow while in Playback Mode:

1. Press the **MENU** button and select the "Slideshow" function.
2. Press **[Z]** to enter the slideshow sub-menu.
3. Press **SET** to start the slideshow.
4. To stop the slideshow, press the **MENU** button.

DELETING MULTIPLE IMAGES OR MOVIES

The Delete options within the Playback Menu can delete multiple or all images and movies.

NOTE: Protected images and movies (indicated with (**Ⓜ**)) cannot be deleted and must be unprotected first.

To delete selected images or movies:

1. When "Select Images" is selected, the LCD displays up to 6 thumbnail images similar to the Multi-Frame Review setting. Use the direction button to navigate.
2. Highlight an image, then press the **WIDE** button to confirm your selection.
3. The **[Z]** icon will then appear to indicate that the image is set for deletion. To cancel the deletion, press the **TELE** button.
4. Repeat Step 2 to set multiple images or movies for deletion.
5. Press the **SET** button to delete selected images.
6. Press the **SET** button to confirm deletion.

To delete all images or movies:

When "All" is selected from the Menu, press the **SET** button to confirm deletion of all images and movies.


FILE COPY

You can choose where to copy files: either from the camera's internal memory or from the memory card.

NOTE: The default setting is set to copy all files to the memory card.

PROTECTING IMAGES OR MOVIES

You can protect / unprotect selected or all images and movies from accidental deletion.

1. In any Camera or Movie Mode, press the **PLAYBACK** button.
2. Press the **MENU** button.
3. Go to "Protect" in the Menu, then choose "Select" and press the **SET** button. The LCD displays up to 6 thumbnail images similar to the Multi-Frame Review setting. Use the direction button to navigate.
4. Highlight an image, then press the **WIDE** button to confirm your selection. The () icon will then appear to indicate that the image is set for protection. (Press the **TELE** button to unmark your selection).
5. To cancel the protection, press the **MENU** button. To confirm your selection of images to delete, press the **SET** button.
6. Press the **SET** button to confirm deletion.

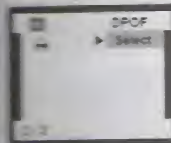
Repeat steps 4-6 to set multiple images or movies for protection.

To protect all images or movies:

1. When "All" is selected from the Menu screen, press the **SET** button to confirm the protection of all images and movies.
2. To unprotect all images and movies, select the "Unprot. All" option and then press the **SET** button to confirm.

29

DPOF (SPECIFYING DIGITAL PRINT ORDER FORMAT)



The DPOF option in the Playback Menu is used to specify the quantity of selected images for printing from the SD card / MMC (memory card). When used, the SD card / MMC can then be used in printers or taken to specialists in order to print the images.

NOTE: This function is only used for still images. Movies cannot be transferred to digital prints.

NOTE: You can only specify the DPOF in the internal memory by transferring the images to a blank SD card / MMC via an SD card / MMC reader (sold separately).

To specify the DPOF of selected images:

1. In any Camera or Movie Mode, press the **PLAYBACK** button.
2. Press the **MENU** button.
3. Go to "DPOF" in the Menu, then choose "Select". The LCD displays up to 6 thumbnail images similar to the Multi-Frame Review setting. Use the direction button to navigate.
4. Highlight an image, then press the **WIDE** button to confirm your selection.
5. With the thumbnail frame flashing, use the direction button to press Δ or ∇ to set the number of prints for the selected image (up to a maximum of 9 for the selected image).
6. When done, press the **WIDE** button once again.
7. Press the **SET** button, and then press the **SET** button again to confirm selection.

Repeat Steps 4-6 to select more images for printing or change the previously specified numbers.

30

To specify the DPOF of all images:

1. When "All" is selected from the Menu screen, all images will be set to the same specified printing number.
2. Use the direction button to press Δ or ∇ to set the number of prints of all stored images.
3. When done, press the **WIDE** button once again.
4. Press the **SET** button, and then press the **SET** button again to confirm selection.

VOICE MEMO MODE

ACTIVATING THE VOICE MEMO FEATURE

1. To activate the Voice Memo feature, turn the Mode Dial to the Voice Memo position to activate the function. The camera will enter the recording mode by default.
2. To toggle between the recording and playback modes, press the **PLAYBACK** button.

RECORDING VOICE

To record voice:

1. Turn the Mode Dial to Voice Memo.
2. Press the **SET** button to begin recording. (The graphical instruction of "REC" and "STOP" are displayed in the LCD display).
3. Press the **SET** button again to stop recording.



When the recording starts, a time counter will be displayed showing the time elapsed.

31

VOICE PLAYBACK

To playback voice recordings, press the **PLAYBACK** button to change to Playback Mode from the Recording Mode. (The graphical instruction of "Playback", "REW", "FF", "Vol+" and "Vol-" are displayed on the LCD screen).



The last file number as well as the time elapsed will be shown on the LCD screen.

To select a different file to playback:

1. Press the **WIDE** button to enter the thumbnail mode (showing 6 files in a single page).
2. Select the file and press the **TELE** button to return to Playback Mode.
3. Press the **SET** button to play the Voice Memo Recording.

When playback starts, a status bar will be displayed showing the time elapsed and current file number.

COPYING FILES

To copy files:

1. Press the **MENU** button while in Playback mode.
2. Select the "Copy" function (press ∇ to choose copying files function).
3. Press the \blacktriangleright button to access choice of memory card or camera.
4. Press the **SET** button to confirm.

You can either copy all camera files to the memory card or you can copy selected files from the memory card to your internal memory.

32

FROM INTERNAL MEMORY TO MEMORY CARD

1. Press the **SET** button to select and confirm the option (of copying files to the memory card).
2. Press the **SET** button to confirm the option and press the **MENU** button to cancel.
3. If "confirm" is selected, a status bar is displayed with the file copying in progress shown.
4. After the copying is done, the camera will return to the menu page.

FROM MEMORY CARD TO INTERNAL MEMORY

1. Press the **SET** button to select and confirm the option. Thumbnail images (6 images in total) will be displayed in the LCD).
2. Press the arrow keys to select the images to be copied.
3. Press the **W** button to confirm selected image.
4. Press the **T** button to cancel selection.
5. Press the **SET** button to confirm the operation.
6. Select "confirm" and press the **SET** button to confirm the copy of files to the internal memory of the camera.
7. After copying is done, the camera will return to the menu page.

NOTE: When copying files from the camera's internal memory to the memory card you can copy all files at the same time. When copying from the memory card to the camera you can only copy one file at a time; note that voice memo files cannot be copied from memory card to camera's internal memory.

CONNECTING TO EXTERNAL DEVICES

CONNECTING TO A TV

You can playback the images and movies you have recorded in the camera on your TV. Connect your camera to the TV with the video cable (included).

NOTE: Be sure to adjust the TV Out setting to correspond with your camera's system (PAL / NTSC) before connecting the camera to the TV.

1. Connect your digital camera to the TV:
1. Turn off the TV and camera before connecting the video cable.
2. Plug the video cable into the camera's video socket.
3. Connect the video cable's yellow connector to the yellow AV input terminal of your TV.
4. Turn the TV and camera on. Make sure to switch the TV to the appropriate AV channel display.

NOTE: The LCD is automatically turned off when the camera is connected to a TV.

NOTE: All image / movies can be viewed in Playback Mode or the camera can be used as a TV Cam in Record Mode.

INSTALLING SOFTWARE DRIVERS (WINDOWS-BASED PC)

Use the USB cable included to connect the camera to your Windows-based PC. This enables you to transfer, edit, and playback pictures and movies onto your PC.

Users of Windows 98SE-based PCs must install the software first before connecting the camera to the computer.

1. Install the software driver:
1. Insert the CD labeled "DS9610" into your CD-ROM drive. The installation will start automatically.
2. If the "auto-run" feature is disabled on your PC, start the installation by running [x:\setup.exe] where "x:" is the drive letter of the CD-ROM drive.
3. Follow the on-screen instruction to complete the installation of the camera drivers and software. When done, click on the FINISH button on-screen to restart the PC.

NOTE: Macintosh computers do not require software driver installation.

TRANSFERRING FILES FROM CAMERA TO PC OR MACINTOSH

Only the images, movies and voice memos stored in your camera's current memory device (SD card / MMC or internal memory) will be visible on your PC or Macintosh.

NOTE: The LCD is automatically off when your camera is connected to the PC or Macintosh. The camera can be connected to the PC regardless of whether the camera is turned on or off.

To transfer files from your camera to your computer:

1. Turn on your PC or Macintosh and allow your system's operating system to boot.
2. Connect the camera to your PC or Macintosh using the USB cable.
3. Once connected, the camera's status lamp will blink.
4. The camera will then appear as a Removable Disk drive on your PC's My Computer screen.

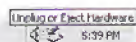
NOTE: When you connect your digital camera to your Macintosh, it will appear as a drive icon on the desktop (i.e. Untitled). Click on it to access the images and movies that are stored on your camera.

1. Double-click on the "Removable Disk" drive. Two folders, [DCIM] and [MISC], are now visible. Ignore the [MISC] file (it contains DPOF information) and double-click on the [DCIM] folder.
2. A new subfolder is now visible, [100DSHOT]. It contains all images stored as .JPG files, movie clips as .ASF files, and voice files as .WAV files.
3. You can double-click on the images and movies to view them. These files can also be deleted, copied, or moved like normal computer files (drag and drop).

DISCONNECTING THE CAMERA FROM THE PC

For PC users with Windows ME, 2000, or XP operating systems, the camera device driver should be stopped before disconnecting the USB device.

1. Find the "Unplug or Eject Hardware" icon in your Windows system tray.



2. Right-click on the icon. The "Stop USB Disk" option will pop up. Highlight and left-click on the option.
3. A pop-up window will inform you that the USB device can now be safely removed.
4. Disconnect the USB cable from the camera and/or from the PC.

NOTE: For Macintosh systems, drag and drop the "Untitled" icon from the desktop to the "Trash" icon before disconnecting.

TIP: Before unplugging your camera from your computer, wait at least 15 seconds after the transfer is completed to prevent any data loss that may occur.

ADDENDUM

MEMORY CAPACITY, SIZE AND QUALITY

The table below indicates the approximate number of images that can be stored when using the 128MB SD card.

RESOLUTION	APPROXIMATE NUMBER OF PICTURES STORED UNDER THE FOLLOWING PICTURE QUALITY SELECTIONS		
	HIGH	STANDARD	ECONOMY
Extra Super Fine (2304 x 1728)	62	94	124
Super Fine (2048 x 1536)	78	117	154
Fine (1600 x 1200)	96	154	203
Normal (1280 x 1024)	227	351	483
Basic (640 x 480)	645	774	967

NOTE: The above table is based on standard shooting conditions tested by Oregon Scientific and may vary depending on the subject, shooting conditions, capture modes, and SD card / MMC memory capacity.

TROUBLESHOOTING

PROBLEM	SYMPTOM	CHECK THIS	REMEDY
No Power	Power will not turn on or camera turns off automatically	Batteries are exhausted	Replace with new batteries
		Batteries are inserted incorrectly	Insert the batteries correctly
	Power turns off after turning on	Battery level is too low	Replace with new batteries
		Auto Off Function is enabled	Disable the Auto Off Function

37

PROBLEM	SYMPTOM	CHECK THIS	REMEDY
Taking Pictures	Cannot take pictures when the SHUTTER RELEASE button is pressed	Camera not turned on	Turn on the camera
		No space on the SD card / MMC / internal memory	Delete unwanted files or insert a new SD card or MMC
	Flash does not go off as expected	Camera is not set to Camera Mode	Change the Mode Dial to Camera Mode
		Flash is set to No Flash Mode	Enable flash by changing it to another setting
	Image taken appears too dark or blurred	Flash has not finished charging	Wait until the Status Lamp stops blinking
		Check your Flash Mode	Turn on the flash by changing the Flash Mode
		The subject is too far away	Move closer to the subject
		The lens is dirty	Clean the lens with a soft cloth
		Incorrect focus mode setting	Set the dial to the correct focus distance

38

PROBLEM	SYMPTOM	CHECK THIS	REMEDY
Playback	Playback menu is not available after pressing the MENU button	No images or movies are recorded	Make sure images or movies are located in the internal memory or memory card
	Cannot play back images or movies	Camera is not set to Playback Mode	Press the PLAYBACK button to enter Playback Mode
		No images or movies are recorded	Images located in internal memory instead. Remove SD card / MMC
Connecting with External Devices	Picture not shown on TV when connected	Images or movies are protected	Unprotect the images or movies
		Check cable connection	Make sure yellow video cable is plugged into the TV's AV terminal
		Check channel on TV	TV channel should be switched to the appropriate AV channel

39

PROBLEM	SYMPTOM	CHECK THIS	REMEDY
	Camera does not appear as Removable Disk when connected to a PC	Check the USB cable connection	Make sure both ends of the USB cable are connected
		Camera or PC is not turned on	Turn on the camera and PC

SPECIFICATIONS

TYPE	DESCRIPTION
Sensor	Total number of pixels: 4.0 million
Image size	Selectable from: • 2304 x 1728 pixels • 2048 x 1536 pixels • 1600 x 1200 pixels • 1280 x 1024 pixels • 640 x 480 pixels (VGA)
File Format	DCF- and DPOF-compliant (Exif ver. 2.2 JPEG-compliant)
Lens	Type: auto-focus Focus range: 1m to infinity (normal) 20-30cm (macro) F-number: F2.6 - F4.9 Focal length: f = 5.5 - 16.5mm (35mm equivalent)

40